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| 10/599,066 | 09/19/2006 | Ludwig Brehm | 1092-162 PCT/US/RCE | 3721 |

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| EXAMINER |
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GRABOWSKI, KYLE ROBERT

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| ART UNIT | PAPER NUMBER |
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3725

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02/14/2011

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|-------------------------------------|--|
| Office Action Summary | Application No. 10/599,066 | Applicant(s) BREHM ET AL. | |
| | Examiner Kyle Grabowski | Art Unit 3725 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 December 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7,9-16,18 and 20-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7,9-16,18 and 20-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 1-16, 18, and 20-22, are rejected under 35 U.S.C. 103(a) as being unpatentable over Moreau (EP 1,398,174) in view of Cote et al. (US 2005/0040641).

4. In respect to claims 1, 4, 6-7, 14-16, 18, and 20-22, Moreau discloses a banknote comprising: a paper support 1; a film element 11 having optical security features 15; and a transparent sealing layer 14; the support 1 has window-shaped openings 2 (which may be through holes, 0009) which are closed by the film element 11 which projects beyond it on all sides; the sealing layer 14 covers the film element at least in the region

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of through holes 2 and is on the opposite side of paper support 1 to film element 11 (0027, Fig. 4).

5. Moreau does not disclose providing the lacquer layer (broadly synonymous with sealing layer) via a printing, scattering, sprinkling, or spraying method however, Cote et al. teach providing a protective layer lacquer layer comprising, for example, polypropylene (0044) which may be applied as coating of preferably 4 to about 8 microns (0043) and it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the lacquer layer taught in Moreau as a 4 to 8 micron thick polypropylene coating as taught in Cote et al. to provide a material and thickness that effectively acts as a barrier to chemical penetration (0043, Cote et al.). Furthermore, the claim would have been obvious because a particular known technique was recognized as part of the ordinary capabilities of one skilled in the art (i.e. providing a sufficient thickness for desired properties is a technique within the purview of one of ordinary skill; similarly providing the lacquer layer through a printing operation is a known technique). The combination of Moreau and Cote et al. teach providing a sealing layer formed of a coating and applying it to cover a through hole on a substrate. This combination would result in the sealing layer engaging at least a portion of the cut edges and forming the inner surfaces of the through-hole and engaging the film element. This is due to the physical properties of the lacquer where the thick and viscous coating wraps into inner holes provided between indicia 14, which is analogous to the covered through holes each bearing significant changes in cross section (Fig. 9); Cote et al. specifically teach that the lacquer *fully encapsulates* the

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material to be protected (Col. 5, 54-61 & Abstract). Regardless, although product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.” *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). Moreau discloses that the film element may comprise polycarbonate (0022). Moreau as modified by Cote et al. teach a polypropylene lacquer layer. The liner expansion coefficient of polycarbonate is 39.0 (10 x -6, in/in F) and polypropylene is 50.3 (10 x -6, in/in F). These numbers can be construed to be "approximately correspond[ing]" (see NPL).

7. In respect to claim 2, Moreau further discloses that the second strip 10 (sealing layer) may be same size as the strip 3 (0023, Fig. 1). Note that the embodiment above in claim 1 incorporates elements of this embodiment (0027).

8. In respect to claim 3, Moreau substantially discloses the claimed subject matter for the reasons stated above including that the sealing layer may be larger than the film element (0023) but does not disclose the particular range of 100% to 120% larger. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a relatively larger sealing layer of 100% to 120%, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.p. Furthermore, Figure 1 shows the sealing layer 10 only

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marginally larger than film element 3, so apparently just over 100% (i.e. not exceeding 120%).

9. In respect to claim 5, Moreau discloses that optical security feature comprising printing (0015).

10. In respect to claims 9-13, Cote discloses several choices for a printed coating e.g. polyester, polypropylene, polyethylene. However Moreau does not limit the film element to solely PET or PC but rather that "other materials known in the art are of course possible". Polyester, polypropylene, and polyethylene are well known in the art, and it would have been obvious to one of ordinary skill in the art at the time the invention was made to select the same material as the coating layer (resulting in near identical physical properties) since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

11. In respect to claims 14-16, Moreau discloses the claimed subject matter for the reasons stated above.

Response to Arguments

12. The arguments that PET is not suitable to be printed, scattered, sprinkled, or sprayed are persuasive. However Cote discloses several other materials suitable for printing e.g. polyester, polypropylene, and polyethylene. Although Moreau does not explicitly state that the film may also be one of these materials (thus having similar

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physicals properties) these materials are well known in the art and Moreau does not limit the film to any particular material (0022).

Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kyle Grabowski whose telephone number is (571)270-3518. The examiner can normally be reached on Monday-Thursday, 9am - 7pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dana Ross can be reached on (571)272-4480. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kyle Grabowski/
Examiner, Art Unit 3725

/Dana Ross/
Supervisory Patent Examiner, Art
Unit 3725

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